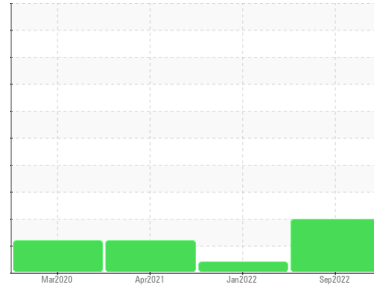


PROBLEM SUMMARY

Sample Rating Trend



ISO



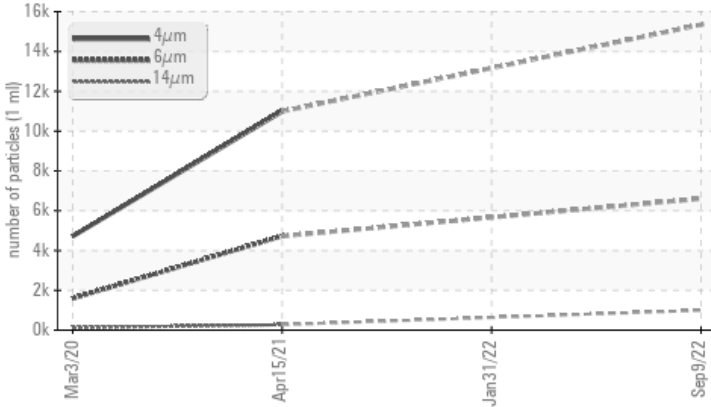
Machine Id
6383655 (S/N 1165)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	ASTM D7647	ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	>1300	▲ 6607	---	▲ 4722	
Particles >14µm	>80	▲ 996	---	▲ 273	
Particles >21µm	>20	▲ 188	---	▲ 56	
Particles >38µm	>4	▲ 8	---	2	
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/20/17	---	▲ 19/15

Customer Id: SMAFOR
Sample No.: KCP49390
Lab Number: 05648344
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

31 Jan 2022 Diag: Don Baldrige

VIS DEBRIS



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



15 Apr 2021 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



03 Mar 2020 Diag: Jonathan Hester

ISO

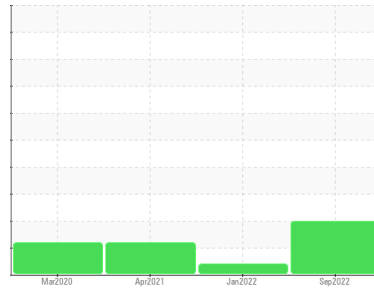


Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



Machine Id
6383655 (S/N 1165)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			KCP49390	KCP48692	KCP27683
Sample Date			09 Sep 2022	31 Jan 2022	15 Apr 2021
Machine Age	hrs		17030	13972	9456
Oil Age	hrs		3058	4516	4666
Oil Changed			Changed	Not Changd	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<1	3	2
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	<1
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	<1	<1
Aluminum	ppm	ASTM D5185m >10	<1	<1	<1
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	22	16	12
Tin	ppm	ASTM D5185m >10	0	0	0
Antimony	ppm	ASTM D5185m	---	0	2
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 90	12	27	26
Calcium	ppm	ASTM D5185m 2	0	<1	0
Phosphorus	ppm	ASTM D5185m	9	10	0
Zinc	ppm	ASTM D5185m	23	27	26
Sulfur	ppm	ASTM D5185m	24439	17068	16103

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	1	<1	0
Sodium	ppm	ASTM D5185m	4	9	12
Potassium	ppm	ASTM D5185m >20	<1	0	13
Water	%	ASTM D6304 >0.05	0.012	0.007	0.020
ppm Water	ppm	ASTM D6304 >500	128.6	70.5	204.0

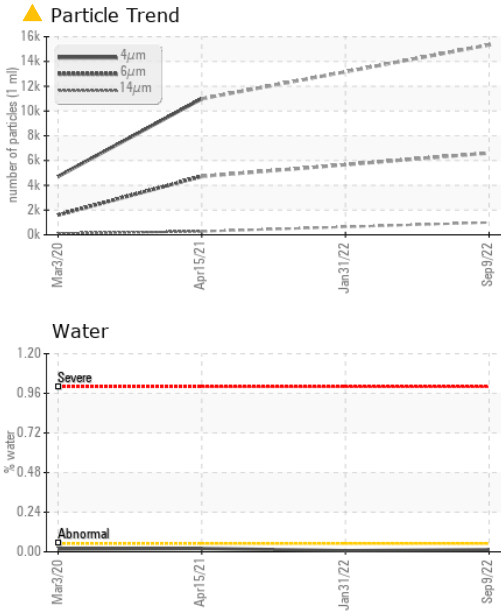
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		15343	---	10990
Particles >6µm	ASTM D7647 >1300		▲ 6607	---	▲ 4722
Particles >14µm	ASTM D7647 >80		▲ 996	---	▲ 273
Particles >21µm	ASTM D7647 >20		▲ 188	---	▲ 56
Particles >38µm	ASTM D7647 >4		▲ 8	---	2
Particles >71µm	ASTM D7647 >3		1	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		▲ 21/20/17	---	▲ 19/15

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.336	0.32	0.287

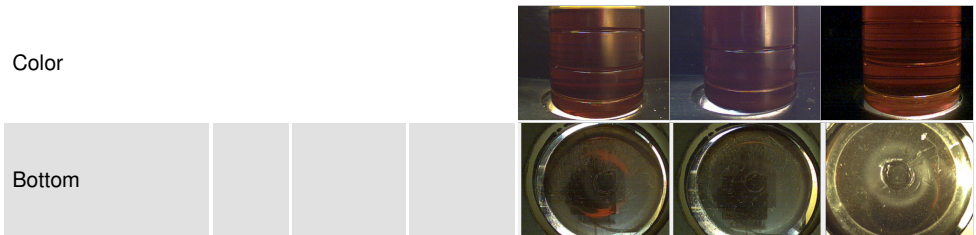
OIL ANALYSIS REPORT



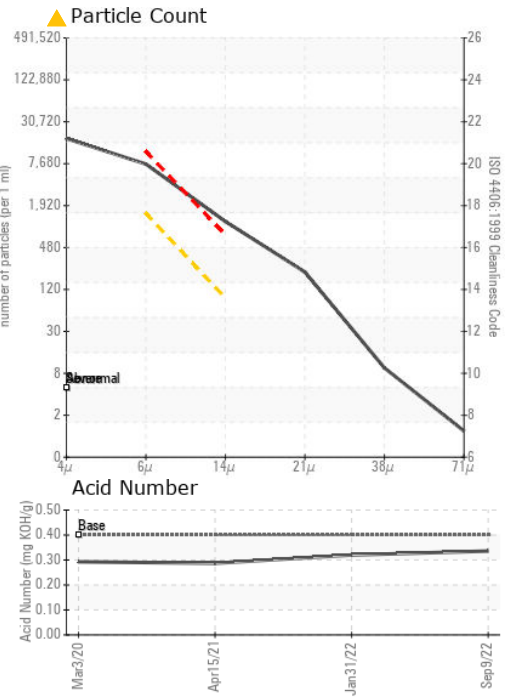
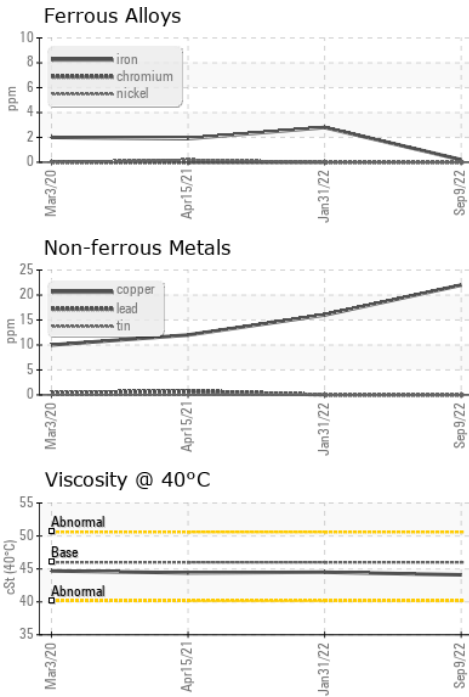
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	44.1	44.5

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP49390 **Received** : 22 Sep 2022
Lab Number : 05648344 **Diagnosed** : 24 Sep 2022
Unique Number : 10142883 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

SMART LASER MANUFACTURING
 11821 N PROFIT RD
 FORNEY, TX
 USA 75126
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)